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08.08.2001 US 927732
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(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
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(54) **Ferroelectric slot antenna**

(57) A family of FE dielectric-tuned slot antennas and a method for frequency tuning a wireless communications antenna are provided. The method comprises: forming a radiator (504); forming a dielectric with ferroelectric material proximate to the radiator (506) forming a counterpoise (502); forming a slot (508); applying a voltage to the ferroelectric material; in response to applying the voltage, generating a dielectric constant; and, in response to the dielectric constant, communicating elec-

tromagnetic fields at a resonant frequency. Some aspects of the method further comprise: varying the applied voltage; and, modifying the resonant frequency in response to changes in the applied voltage. Modifying the resonant frequency includes forming an antenna with a variable operating frequency responsive to the applied voltage. Alternately stated, forming an antenna with a variable operating frequency includes forming an antenna with a predetermined fixed characteristic impedance, independent of the resonant frequency.

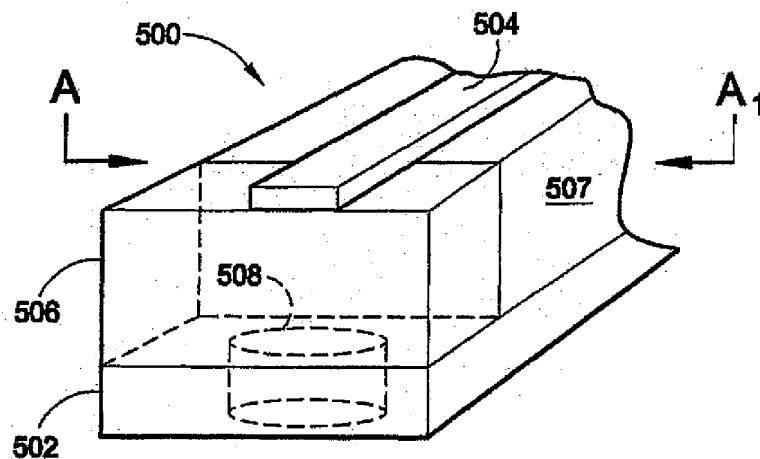


FIG. 5a

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Place of search Munich		Date of completion of the search 16 January 2008	Examiner LA CASTA MUNOA, S
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